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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,257	04/01/2004	Pawel S. Veselov	SUNMP365	1784
32291	7590	05/19/2006	EXAMINER	
MARTINE PENILLA & GENCARELLA, LLP 710 LAKEWAY DRIVE SUITE 200 SUNNYVALE, CA 94085			NGUYEN BA, PAUL H	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 05/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/817,257

Applicant(s)

VESELOV, PAWEL S.

Examiner

Paul Nguyen-Ba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/22/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant

1. This action is responsive to:
 - a. Information Disclosure Statement (IDS) filed on 8/22/2005, and
 - b. Original Application filed on 4/1/2004.
2. Claims 1-21 are currently pending. Claims 1, 10, and 16 are independent claims.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 1-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Regarding claim 1, the language of the claim raise a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and **tangible** result to form the basis of statutory subject matter under 35 U.S.C. §101. The method step could be done by a person as a mental step and does not require the use of hardware to accomplish the step.

Regarding claim 10, the system is at best directed to an arrangement of software, *per se*, and is not tangibly implemented in hardware.

Claims 2-9 and 11-15, are dependent upon independent claims 1 and 10 respectively, and do not add any limitations that would render these claims statutory under 35 U.S.C. § 101. Therefore, these claims are likewise rejected.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 10, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al. ("Lee"), U.S. Patent Application Publication No. 2004/0002952.

Regarding independent claim 1, Lee teaches a method, comprising:

➤ *obtaining an XML document (see Abstract and para [0036]: Lee teaches a method for verifying the validity of a received XML document when an XML application operates in an embedded device having a relatively low performance processor and a small memory as to prevent errors in the XML application due to wrong information);*

➤ *accessing a compiled document type definition (DTD) for the XML document; and verifying the XML document using the compiled DTD (see paras [0009], [0032-0033] and Figs 4 and 5: Lee teaches an XML validator which includes a schema/DTD receiver. The schema/DTD receiver is requested to verify the validity of the XML document from the XML parser and receives a schema or a DTD corresponding to the XML document from the schema/DTD database. The XML validator then applies the XML document to the received schema or the DTD to verify the validity of the XML document).*

Independent claims 10 and 16 incorporate substantially similar subject matter as independent claim 1, and are rejected along the same rationale.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 2-9, 11-15, and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. ("Lee"), U.S. Patent Application Publication No. 2004/0002952, in view of Tuatini, U.S. Patent No. U.S. Patent Application Publication No. 2001/0054172.**

Regarding claims 2 and 17, Lee teaches obtaining an XML document accessing a compiled document type definition (DTD) for the XML document; and verifying the XML document using the compiled DTD as discussed in the rejection of claim 1 and suggests (see paras [0005] and [0019]), but does not explicitly teach *creating a structure corresponding to a DTD document*.

However, Tuatini teaches a compiler including a parser and a code generator (see Abstract). The parser inputs the XML DTD's and generates a syntax parse tree representation of the DTD's (see paras [0010-0012]).

Since both references are from the same field of endeavor, the motivational purpose of reducing the cost of developing and maintaining validation applications as disclosed by Tuatini would have been recognized in the pertinent art of Lee. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Lee with the teachings of Tuatini to include creating a structure corresponding to a DTD document.

Regarding claim 3, Lee, in view of Tuatini, further teach *traversing the structure to verify the XML document* (see Lee - para [0005] and [0009]: Lee teaches an XML parser that verifies the grammar of the DTD structure).

Regarding claims 4, 11-13, and 19, Lee, in view of Tuatini, further teach storing the parsed data in a tree structure and allows an access to a specific element (see Lee - para [0024]).

Regarding claims 5 and 18, Lee teaches obtaining an XML document accessing a compiled document type definition (DTD) for the XML document; and verifying the XML document using the compiled DTD as discussed in the rejection of

claim 1 and suggests, but does not explicitly teach *parsing a DTD document to generated source code*.

However, Tuatini teaches a compiler including a parser and a code generator (see Abstract). The parser inputs the XML DTD's and generates a syntax parse tree representation of the DTD's (see paras [0010-0012]).

Since both references are from the same field of endeavor, the motivational purpose of reducing the cost of developing and maintaining validation applications as disclosed by Tuatini would have been recognized in the pertinent art of Lee. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Lee with the teachings of Tuatini.

Regarding claims 6 and 15, Lee, in view of Tuatini, further teach compiling the source code with a verifier interface to generate the compiled DTD (see Tuatini - paras [0010-0012]).

Regarding claims 7 and 14, Lee, in view of Tuatini, teach an XML validator which includes a schema/DTD receiver. The schema/DTD receiver is requested to verify the validity of the XML document from the XML parser and receives a schema or a DTD corresponding to the XML document from the schema/DTD database. The XML validator then applies the XML document to the received schema or the DTD to verify the validity of the XML document (see paras [0009], [0032-0033] and Figs 4 and 5 - *compare with "access portions of the compiled DTD during verification"*).

Regarding claims 8 and 20, Lee teaches the method of claim 1, but does not explicitly teach executing a verification algorithm being capable of distinguishing an order of elements in a DTD document.

However, Tuatini teaches a DTD that defines an “order query” that is capable of distinguishing an order to elements in a DTD document (see paras [0013-0016]).

Since both references are from the same field of endeavor, the motivational purpose of reducing the cost of developing and maintaining validation applications as disclosed by Tuatini would have been recognized in the pertinent art of Lee. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Lee with the teachings of Tuatini.

Regarding claim 9, Lee, in view of Tuatini, teach generating an error (see Lee – paras [0031] and [0036]).

Regarding claim 21, Lee teaches obtaining an XML document accessing a compiled document type definition (DTD) for the XML document; and verifying the XML document using the compiled DTD as discussed in the rejection of claim 1 and suggests (see paras [0005] and [0019]), but does not explicitly teach *adding nodes to a tree defined as the structure*.

However, Tuatini teaches a compiler that generates a syntax parse tree representation of the DTD's with enhanced syntax data. The compiler adds the

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annotated syntax to the parse tree as well as class definitions, the serialization code, and the validation logic (see para [0010] *et seq.*).

Since both references are from the same field of endeavor, the motivational purpose of reducing the cost of developing and maintaining validation applications as disclosed by Tuatini would have been recognized in the pertinent art of Lee. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the teaching of Lee with the teachings of Tuatini.

Conclusion

9. The prior art made of record on form PT0-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Nguyen-Ba whose telephone number is (571) 272-4094. The examiner can normally be reached on 11 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PNB
5/4/06


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